



GREEN MOUNTAIN POWER

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January 30, 2007

VIA EMAIL & FIRST CLASS MAIL

Mrs. Susan Hudson, Clerk
Vermont Public Service Board
112 State Street, Drawer 20
Montpelier, VT 05620-2601

RE: Year 2007 Efficiency Targeting Effectiveness

Dear Ms. Hudson:

The following are Green Mountain Power's ("GMP") comments in response to the Public Service Board's ("PSB") January 8, 2007 order requiring Efficiency Vermont ("EVT") to target energy efficiency measures in four geographic areas. As Ed McNamara of the PSB noted in his email dated January 16, 2007:

".....the protocol is meant to be a conceptual document that describes in broad strokes at least the following:

- (1) How to determine if the targeting is effective (for example: would deferral of an infrastructure upgrade for only two years be considered a success; is targeting effective if an upgrade is deferred but then the costs of the deferred upgrade rise substantially by the time it needs to be built);
- (2) the information that would need to be collected to determine whether the targeting is effective;
- (3) how to determine if a given targeting effort is on the path to defer an upgrade (in other words, are there interim measurements that could be developed that would provide information regarding whether targeting will achieve the desired effect."

GMP believes the deferral of planned infrastructure improvements is ultimately the only way to show whether targeted efficiency has been successful. This deferral is primarily

dependent upon reducing, maintaining, or slowing the expected capacity growth on a circuit or group of circuits that are involved in an upgrade. We believe maximum MW demand at system peak on the circuit should be tracked for the appropriate season (summer or winter peaking). Different prescriptive measures can then be implemented by EVT to reduce customer's usage during expected peak demand periods.

Each circuit serving constrained areas has a load history. The load history can be projected using regression analysis to forecast loads that can be used as part of load flow simulations. Results of these load flow simulations determine timing requirements for infrastructure improvements to meet the planning criteria. To be effective, targeted efficiency measurements should modify the projected loads sufficiently to change the timing requirements for infrastructure improvements.

More specifically, GMP responds to Mr. McNamara's questions as follows:

- 1) Absent evidence to the contrary, it is reasonable to assume the cost of a postponed project will generally rise at the rate of inflation. While there may be events (weather, demand for materials, and other unusual events) that could cause costs of deferred projects to increase over the inflation rate, these events are not predictable and should not be assumed. Therefore the estimated deferral value for each year after the projected date of need is equivalent to avoided investment returns (including taxes), of 13-17 percent of total project costs, as determined by using a societal cost test. Data points needed to quantify cost effectiveness include funds spent and expected total cost of the infrastructure improvement.
- 2) The following targeted circuit data should be provided by the utilities: circuit name, load forecast, peaking season, customer list by circuit, upgrade description, estimated cost, and date of need for the required upgrade. The following data would be needed from EVT: usage data derived from the utilities' customer lists, a list of measures that would be installed, an estimate by year and by circuit of how much demand could be curtailed and at what cost, an analysis of what deferral period EVT believes can be achieved, the estimated annual energy savings, the estimated annual demand savings during the expected peak period, the demand reduction by measure, the cost effectiveness of the measures, and a description of the overall program including specifics regarding timing of the program implementation schedule, an assessment of measures that have been installed in the program area to date and the technical potential for the area.
- 3) The process should be iterative. The data and the simulations should be revisited at least annually. In each iteration, the circuits should be reviewed and the analysis updated to justify continued action. In addition, circuits that were excluded initially may exhibit new characteristics that require future prescriptive measures. The participating utilities should identify any such circuits and provide relevant data to EVT.

Susan Hudson, Clerk
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Page 3 of 3

Thank you for the opportunity to comment. If you have any questions about these comments or if we can provide additional information to assist the Board, please let me know.

Sincerely,

A handwritten signature in black ink, appearing to read "D.P. Martin". The signature is fluid and cursive, with the first letters of the first and last names being capitalized and prominent.

David P. Martin
Green Mountain Power

cc: Act 61 – EEU Service List